Title: "What the UV SED Tells us About Stellar Populations and Galaxies"

Presenter: Sara R. Heap

Abstract:

The UV SED parameter $b \square$ as in $f_1 \sim l^b$, is commonly used to estimate fundamental properties of high-redshift galaxies including age and metallicity. However, sources and processes other than age and metallicity can influence the value of b. We use the local star-forming dwarf galaxy, I Zw 18, in a case study to investigate uncertainties in age and metallicity inferred from b due errors or uncertainties in:

- mode of star formation (instantaneous starburst vs. continuous SF)
- dust extinction
- nebular continuous emission (2-photon emission, Balmer continuum flux)
- presence of older stars